UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 19 2012

REPLY TO THE ATTENTION OF:
WC-15J

CERTIFIED MAIL 7009 1680 0000 7669 4766
RETURN RECEIPT REQUESTED

Mr. FOIA Exemption (b) (6)
FOIA Exemption (b) (6)
FOIA Exemption (b) (6)

Subject: Clean Water Act Compliance Evaluation Inspection Report

Dear Mr. FOIA Exemption (b) (6):

On September 5, 2012, U.S. Environmental Protection Agency conducted an inspection of your facility Win Productions, LLC in Winchester, Illinois. The purpose of the inspection was to provide oversight for the Illinois Environmental Protection Agency (IEPA) Inspection Program. The report generated from that inspection, documenting Win Productions, LLC compliance with the Clean Water Act (CWA), is attached.

EPA did not observe violations of the CWA at the time of the inspection. However, EPA observed areas of concern during the inspection. The areas of concerns are noted in the enclosed report. Additionally, the inspection report contains BMPs and record keeping recommendations. Some of these recommendations would help ensure that a discharge of manure, litter, or process wastewater to waters of the United States as the result of the land application of that manure, litter, or process wastewater qualifies as an agricultural stormwater discharge.

For unpermitted Large CAFOs, a precipitation-related discharge of manure, litter, or process wastewater from land application areas under the control of a CAFO shall be considered an agricultural stormwater discharge only where the manure, litter, or process wastewater has been land applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater. Such nutrient management practices are specified under 40 C.F.R. § 122.42(e), including, among other things, implementation of a Nutrient Management Plan. The lack of records showing compliance with the requirements of an agricultural stormwater discharge makes a precipitation-related discharge of manure, litter, or process wastewater from land application subject to National Pollutant Discharge Elimination System (NPDES) requirements. See 40 C.F.R. § 122.23(e).

If you have any questions or concerns about this inspection, you may contact Don Schwer of my staff at (312) 353-8752 or via e-mail at schwer.don@epa.gov.

Sincerely,

James A Coleman
A/F

Ryan Bahr, Chief, Section 2
Water Enforcement and Compliance Assurance Branch

Enclosures.

Cc: Bruce Yurdin, IEPA
David Ginder, IEPA

CWA COMPLIANCE EVALUATION INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

Purpose:	Compliance Evaluation Inspection
Facility:	Win Production, LLC Latitude: +39.614 Longitude: -90.508 Lost Lane Winchester, Illinois 62694
NPDES Permit Number:	None
Date of Inspection:	September 5, 2012
EPA Representatives:	Don Schwer, Agricultural Engineer schwer.don@epa.gov, 312-353-8752 Ben Atkinson, Agronomist atkinson.ben@epa.gov, 312-353-8243
IEPA Representatives:	David Ginder, Environmental Protection Engineer David.Ginder@illinois.gov, 217-557-8761
Facility Representatives:	**FOIA Exemption (b) (6)**
Report Prepared by:	Don Schwer, Agricultural Engineer
Report Date:	October 15, 2012
Inspector's Signature:	DR III

Background

The purpose of this report is to describe, evaluate and document Win Productions, LLC compliance with the Clean Water Act (CWA) at its Winchester, Illinois facility on September 5, 2012.

Win Productions is a swine, farrow to wean operation in Scott County, Illinois. Win Productions is operated by Mr. FOIA Exemption (b) (6), Mr. FOIA Exemption (b) (6) is also part owner. Mr. FOIA Exemption (b) (6) is the onsite manager at Win Productions. At the time of inspection, September 5, 2012, the facility had approximately 2,800 sows and 4,600 piglets on site. Mr. FOIA Exemption (b) (6) said the maximum amount of sows' onsite since the date of operation was approximately 2,800. Mr. FOIA Exemption (b) (6) stated that the facility does not deviate significantly from the number of swine confined at the facility year round. The facility is a large Concentrated Animal Feeding Operation (CAFO) based on the number of animals contained on site for greater than 45 days. All animals were confined to barns. The facility doesn't have a National Pollutant Discharge Elimination System (NPDES) permit.

Win Productions is adjacent to an intermittent unnamed tributary which flows approximately 1.4 miles to a perennial unnamed tributary. The perennial unnamed tributary flows approximately 1.5 miles to perennial Walnut Creek. Walnut Creek flows approximately 5 miles to the Illinois River.

Site Inspection

Mr. Schwer, Mr. Atkinson and Mr. Ginder arrived at Win Productions at 10:00 am and parked the vehicles outside the entrance to the facility for biosecurity reasons. The temperature was 70°F; there was a light rain during the inspection. EPA put on disposable boots and presented credentials to Mr. FOIA Exemption (b) (6) who arrived at 10:15 am. Mr. Schwer led the inspection by asking questions from the EPA checklist and about the facility layout.

Mr. FOIA Exemption (b) (6) is the Certified Livestock Manager for the site. Mr. FOIA Exemption (b) (6) said Win Productions has approximately 9 employees. Mr. FOIA Exemption (b) (6) also said the facility was acquired in 1996. The facility is comprised of approximately 40 acres which includes 5 barns, 4 ponds, a mortality compost shed, and an office. The report will refer to the 5 barns as B1, B2, B3, B4, and B5 and the 4 waste holding ponds as P1, P2, P3, and P4. The location and labeling of the barns is exhibited in Attachment 1.

The barns have 2'-deep below building concrete pits. Waste is contained in the below building pits short term and generally empted weekly. B1 and B2 pits empty directly into P1. B3 and B4 pits are pumped to P1via a lift station on the west side of B3. Additionally, B4 can empty into P3. B5 pits empty into P4. P1 provides primary settling of manure solids and outlets into P2. Waste from P2 can be transferred by pipe to B3 and B4 and then into P3.

Mr. FOIA Exemption (b) (6) estimated 7 million gallons and 1 million gallons storage capacity in the waste holding ponds and below building pits, respectively. The waste holding ponds do not have a managed outfall or discharge point. The ponds are clay lined. The ponds do not contain depth

markers. Waste holding ponds are walked weekly; however, no records of the waste holding pond conditions are kept.

Mortalities are composted on site in a mortality compost shed designed by NRCS. The composting structure contains 30 bins. Mr. [FOIA Exemption (b) (6)] said the mortality rate is approximately 5% for sows and 9% for piglets.

Mr. [FOIA Exemption (b) (6)] said the facility has 1,200 acres available for land application and they consistently use 400 acres in the fall and 200 acres in the spring. Mr. [FOIA Exemption (b) (6)] said manure is applied at the agronomic nitrogen rate. The facility has the ability to apply to land adjacent to the facility in case of emergency. Manure is not transferred off-site to other parties. The facility last land applied in the spring of 2012. A commercial applicator is used for land application. Mr. [FOIA Exemption (b) (6)] said that manure was applied through dragline injection into the soil. Mr. [FOIA Exemption (b) (6)] also stated the land application records are kept in the Comprehensive Nutrient Management Plan (CNMP). Mr. [FOIA Exemption (b) (6)] said the CNMP was updated in June of 2011, and a copy is kept on site; retrieval of the onsite copy was not possibly due to biosecurity measures.

The facility does not utilize bedding material. The pigs are provided drinking water through troughs in the gestation barns and through nipple waters in the farrowing barns. Waste water flows to the below building pits. Feed is contained in bulk tanks. Spilled feed is picked up daily. A berm surrounds the north and west sides of the facility. Two wells are located on-site and the facility also receives water from Winchester, Illinois for human use.

Walkthrough

To facilitate the walkthrough section of this report an overview photograph is included in Attachment 1 which indicates the labeling used for the barns and ponds in the production area. Photographs, labeled IMGP####, of documented Areas of Concern are exhibited in Attachment 2.

Starting at the entrance to the facility EPA proceeded north to P4. Woody growth had recently been cut down around P4's berms after suggestion by Mr. David Ginder during the 4/18/2012 IEPA inspection (IMGP0982). The berms appeared well maintained and the pond had sufficient levels of freeboard.

EPA continued north to the mortality compost shed. EPA observed compost solids and leachate around the immediate perimeter of the shed (IMGP0983, IMGP0984, and IMGP0985). Additionally, the mortality composting shed contained no gutters to facilitate the flow of stormwater. Stormwater could contact compost material around the perimeter of the shed. In the northwest corner of the shed was a ponded area (IMGP0986). The ponded area likely contained some compost process wastewater based on the color, foam, and proximity to the mortality compost shed.

The north and west portion of the facility are surrounded by a berm. EPA walked along the berm and proceeded along the west end of the production area. EPA observed the lift station and then proceeded to P1 and P2. P1 did not have adequate free board. The berms of P1 and P2 were

well maintained. Dumped feed was located in the area east of waste holding pond P2 (IMGP0999). EPA observed the bulk bins; no spilled feed was observed around the bulk bins. EPA continued to the entrance of the facility to conduct the exit briefing.

Exit Briefing

EPA gave a closing conference to Mr. FOIA Exemption (b) (6) which ended at 12:00 p.m. EPA discussed concern over the freeboard levels in the waste holding pond and stormwater management around the mortality compost shed. Mr. FOIA Exemption (b) (6) indicated crops have started to be harvested and that the ponds would be pumped down after harvest was completed. EPA requested a copy of the CNMP. Mr. Ginder said he would send an electric copy of the CNMP. Mr. FOIA Exemption (b) (6) stated he was fine with Mr. Ginder sending a copy of the CNMP to EPA.

Comprehensive Nutrient Management Plan Review

The CNMP was developed in February of 2006 and is current with regard to the 2012 crop year with projections out to the 2018 crop year. The plan was developed by FOIA Exemption (b) (6) and FOIA Exemption (b) (6) at Maurer-Stutz. The CNMP covers the following material: farm overview, emergency response plan, manure and wastewater handling and storage, land treatment practices, cost and quantities for proposed practices, and nutrient management.

Proposed Expansion

The CNMP provides provisions for an expansion to the existing facility. The expansion would consist of the addition of a gestation building which would house 2,650 sows, as well as, an expansion to the farrowing building to house an additional 540 sows. These buildings would have a 6' and 2' pits, respectively. Additionally, the facility has plans to construct a pipeline to transfer manure and process wastewater to the land application fields.

Manure Storage and Handling

The manure storage calculations do not reflect the current operational conditions on site; calculations were conducted using additional storage provided by the proposed structures. Based on recent application rates the yearly production of manure and process wastewater is approximately 3.5 million gallons per year (468,000 CF/year). Manure Storage ponds on site have a working volume of 1.78 million gallons (238,000 CF) and building pits have an approximate working volume of 0.76 million gallons (102,000 CF). The amount of manure generated and the total working volume on site results in approximately 265 days worth of storage. No records of the waste holding ponds freeboard levels are contained in the CNMP.

Mortality Management

The mortality calculations do not reflect the current operational conditions at the facility; the calculations were conducted using the additional swine capacity of the proposed expansion. Projected mortality rates ranged from approximately 1% in the nursery to 10% in preweaned piglets. The CNMP projects approximately ~140,000 lbs of carcasses/year at the current

capacity. The mortalities are composted on site and the resulting compost is land applied. Procedures for mortality management are contained in the Illinois Dead Animal Disposal Act as referenced in the CNMP.

Records for mortality management, such as the amount of mortalities and carbon sources added to compost bins, when bins were turned, and daily temperature readings in the compost bins were not contained in the CNMP. Land application records of compost were not contained in the CNMP.

Clean Water Diversion

Protocols to address clean water diversion and good cleanup practices in and around the mortality composting shed were not located in the CNMP.

Agronomic Land Application Rate

After accounting for setbacks, a total of 1,045 acres can be utilized for land application; however, the facility only utilizes approximately 500 acres on a consistent basis. RUSLE2 erosion calculations were performed for the land application fields. Fields consist of the corn/soybean rotation or continuous corn; approximately 25 acres are in alfalfa hay production. Land application fields are rated to have high phosphorus (P) supplying power. The plan states fields are planned to receive manure at a rate of no or minimal phosphorus buildup. The Livestock Management Facilities Act (LMFA) and Natural Resources Conservation Service (NRCS) standard 590 allows for a build of up to 300 lb P/acre. The plans have setbacks and winter application requirements concurrent with the LMFA. Setback boundaries were not apparent from the maps provided in the CNMP.

Procedures for soil and manure testing are located in the CNMP. Manure test results for crop years 2010 until 2012 were located in the CNMP. Manure test results from crop years 2007-2009 were not contained in the CNMP. The soil tests conducted in 2001 resulted in median soil test results of 70 lbs/acre in York fields and 122 lbs/acre in Coon fields. The source of the 2001 soil tests for the York fields was not located in the CNMP. The April 2011 soil tests for the York fields indicate significant buildup of the soil test P value over the 10 year period. The April 2011 P soil test values ranged from 62 lb P/acre (York 8) to 358 lb P/acre (York 4). The proposed management plan developed for 2007 -2012 indicated little to no buildup of P should have occurred; many of the York fields should have reduced in soil test P value during this time period. The 2011 soil test P values indicate more P had been applied than what was projected in the CNMP.

Additional records for soil testing, manure test results from crop years 2007-2009, and actual land application rates for crop years 2007-2009 were not contained in the CNMP. York field T-16198-4 currently exhibits a P test level of 358 lbs/acre. A P test level greater than 300 lbs/acre requires land application of manure at or below the P maintenance fertilizer rate per LMFA regulations. The projected application rates for crop years 2013-2018 show P test values decreasing over the 2013-2018 cropping years which indicates application rates at less than the crop P maintenance fertilizer rates.

The actual land application records were not kept in the CNMP for the previous 5 years. Land application records did not contain: land application date and time, method of application, climate conditions, or soil moisture conditions at the time of application.

Record keeping

A record keeping section contained forms for land application, manure containment levels & berm inspections, and mortality and composter records. The record keeping forms have not been used.

Areas of Concern

EPA observed these Areas of Concern:

1. Levels in P1 lacked the freeboard depth stated in the CNMP.
2. Compost solids and leachate were observed around the perimeter of the mortality compost shed. Clean water could contact the compost solids and leachate.
3. Land application fields contained soil test P values greater than 300 lb/acre.

EPA recommends the following:

4. Develop a system to measure levels in the waste holding ponds.
5. Maintain records of the levels and berm conditions in waste holding ponds.
6. Develop protocols to address clean water diversion and good housekeeping in and around the mortality composting shed.
7. Maintain records for mortality management including:
    a. records required by the Illinois Dead Animal Disposal Act, and
    b. land application records of compost.
8. Develop land application maps showing setback requirements to ensure proper utilization of setback requirements during land application.
9. Maintain land application records that contain at a minimum: field identification, land application date and time, method of application, climate conditions (e.g. no rain in previous 24 hours), soil conditions (e.g. saturated, dry), total acres applied, and application rate.
10. Maintain the record keeping forms located in Appendix E of the CNMP.

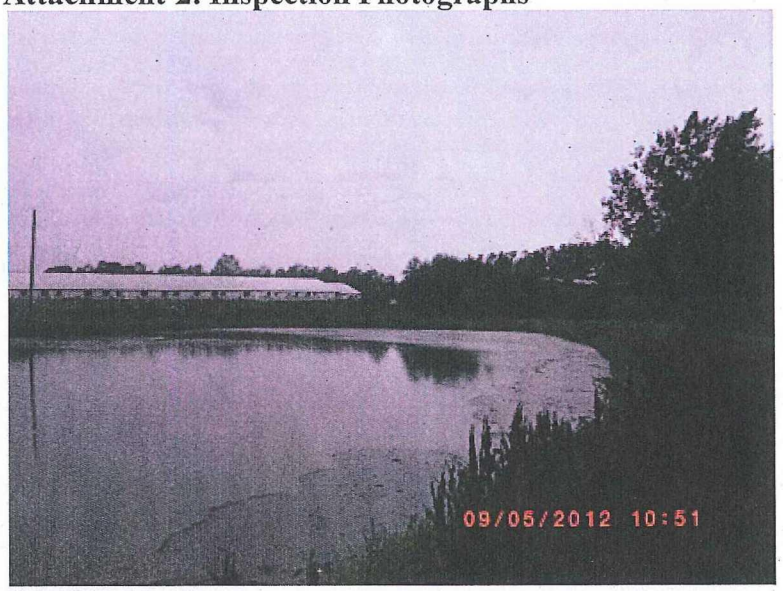
Attachments

1. Overview Photograph
2. Inspection Photographs

Attachment 1: Overview Photograph

Photograph exhibits Win Productions. The barns are denoted by B1, B2, B3, B4, and B5, the ponds are denoted by P1, P2, P3, and P4, and the mortality compost shed by C. White dots exhibit photograph locations.

Attachment 2: Inspection Photographs



IMGP0981: P4
Location: P4
Facing: Northwest
Date/Time: Wednesday, September 5, 2012, 10:51 am

IMGP0982: Trees and shrubs located along P4 berms had been cut after recommendation by Mr. David Ginder during IEPA inspection.
Location: East of P4
Facing: Northeast
Date/Time: Wednesday, September 5, 2012, 10:52 am

IMGP0983: Compost had spilled onto perimeter of the mortality composting shed where it contacts stormwater.
Location: West side of mortality composting shed
Facing: Northeast
Date/Time: Wednesday, September 5, 2012, 10:58 am

IMGP0984: Compost had spilled onto perimeter of the mortality composting shed where it contacts stormwater.
Location: West side of mortality composting shed
Facing: Northeast
Date/Time: Wednesday, September 5, 2012, 10:58 am

IMGP0985: Compost had spilled onto perimeter of the mortality composting shed where it contacts stormwater.
Location: East side of mortality composting shed
Facing: South
Date/Time: Wednesday, September 5, 2012, 11:00 am

IMGP0986: Ponded water near mortality composting shed. Ponded water looked to contain compost nutrients.
Location: West side of mortality composting shed
Facing: Southwest
Date/Time: Wednesday, September 5, 2012, 11:02 am

IMGP0987: A berm had been built around the north and west portion of the facility.
Location: North side of facility
Facing: North/down
Date/Time: Wednesday, September 5, 2012, 11:04 am

IMGP0988: Backside of berm around the facility contained water.
Location: West side of B3
Facing: South
Date/Time: Wednesday, September 5, 2012, 11:08 am

IMGP0989: Lift station that pumps manure from B3 and B4 to P1.
Location: West side of B3
Facing: West
Date/Time: Wednesday, September 5, 2012, 11:10 am

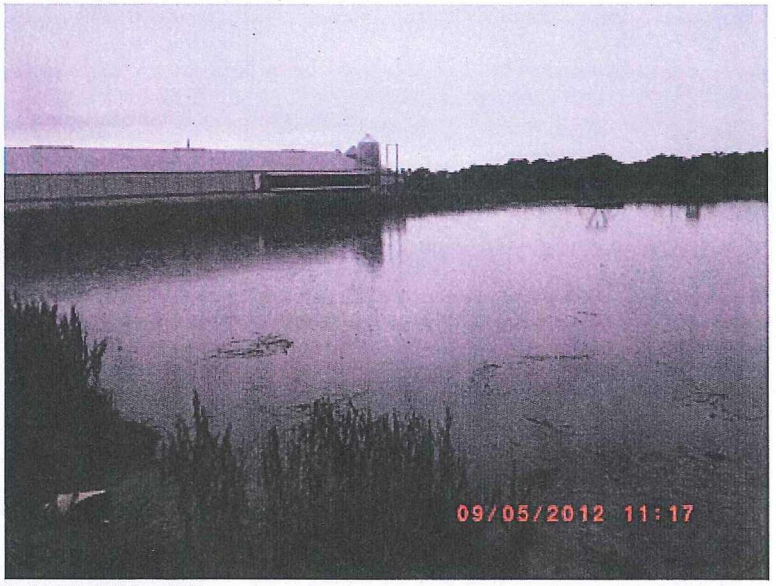
IMGP0990: P1
Location: Southwest side of the facility.
Facing: Southwest
Date/Time: Wednesday, September 5, 2012, 11:13 am

IMGP0991: The northwest corner of P1 was the lowest in elevation. P1 did not contain sufficient freeboard. The NMP calls for a 2 ft freeboard and .6 ft of space to contain the 25 year 24 hour storm event.
Location: Southwest side of the facility
Facing: West
Date/Time: Wednesday, September 5, 2012, 11:13 am

IMGP0992: The pumping station outlets into the northeast corner of the 1. The pumping station was running at the time of the inspection.
Location: Southwest side of the facility
Facing: Down
Date/Time: Wednesday, September 5, 2012, 11:13 am

IMGP0993: The northwest corner of P1 was the lowest in elevation. P1 did not contain sufficient freeboard. The NMP calls for a 2 ft freeboard and .6 ft of space to contain the 25 year 24 hour storm event.
Location: Southwest side of the facility
Facing: West
Date/Time: Wednesday, September 5, 2012, 11:14 am

IMGP0994: P1 outlets to P2.
Location: Southwest side of the facility
Facing: Southeast
Date/Time: Wednesday, September 5, 2012, 11:15 am



IMGP0995: P2
Location: Southwest side of the facility
Facing: North
Date/Time: Wednesday, September 5, 2012, 11:17 am

IMGP0996: P2
Location: Southwest side of the facility
Facing: North
Date/Time: Wednesday, September 5, 2012, 11:17 am

IMGP0997: P2
Location: Southwest side of the facility.
Facing: West
Date/Time: Wednesday, September 5, 2012, 11:20 am

IMGP0998: P2
Location: Southwest side of the facility.
Facing: Down
Date/Time: Wednesday, September 5, 2012, 11:21 am

IMGP0999: There was some feed spilled to the east of P2.
Location: East of P2
Facing: South
Date/Time: Wednesday, September 5, 2012, 11:22 am